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| 10/561,915 | 04/10/2006 | Jean-Luc Clement | 0573-1025 | 1461 |

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| EXAMINER |
|---|
| MERENE, JAN CHRISTOP L |

| ART UNIT | PAPER NUMBER |
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| 3733 | |

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| 08/07/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/561,915 | CLEMENT ET AL. | |
| | Examiner | Art Unit | |
| | JAN CHRISTOPHER MERENE | 3733 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *12 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12 and 15-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12, 15-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-4, 8-9, 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al US 6,267,765 in view of Craig et al US 5,507,817.

Taylor discloses a vertebral osteosynsthesis equipment comprising a bony anchor member with a base portion and a threaded stud with a first end and a second end that is connected to an extension piece having a head portion and end distal portion, where the stud and extension piece have first and second positioning elements configured to engage each other, where the extension piece is removable (see Col 5 lines 30-35), a linking rod, a connecting part and a nut in threaded engagement with the threaded stud, where the extension piece has a diameter such that the nut can slide over the threaded stud and extension piece (as seen in Fig below), wherein the first and second positioning elements are configured to axially connect the proximal stud with the extension piece (as seen in Fig below), the distal end position is threaded to cooperate with the nut (#19 as seen in Fig below), and the outermost diameter of the distal of the end distal portion is smaller than an outermost diameter of the proximal threaded stud (as seen in Fig below).

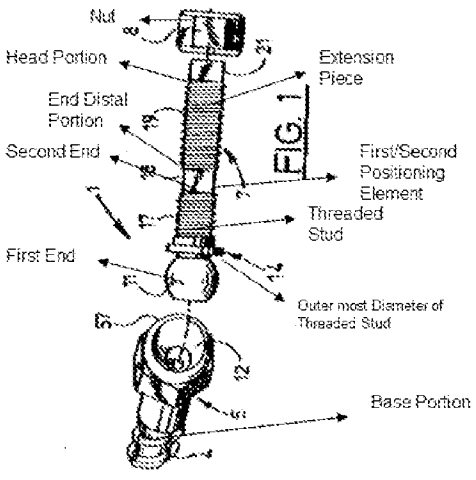


FIG. 1

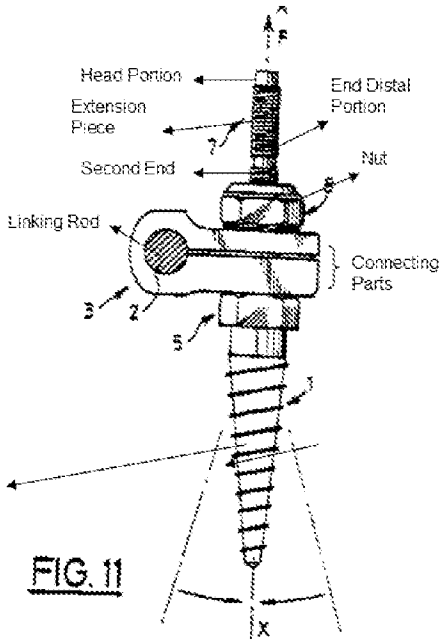


FIG. 11

Taylor does not disclose the threaded stud having a free second end, wherein the first positioning element has a threaded rod and the second positioning element has a bore/ tapered hole, the rod threadingly engaging the bore.

Craig discloses the use of bone anchors with a studs (#100 in Fig 2) with a second free having end which connects with an extension piece (#120) via first and second positioning elements (as seen in Fig 2), where in other embodiments the first position element comprises an integral threaded rod (#32 as seen in Fig 1a) and the second positioning element comprises a tapered hole (#34 in Fig 1a), where the rod is threaded into the tapered hole (as seen in Fig 1 and Col 4 lines 24-35), where the threaded connection is made to adjust the length of the anchor in order to provide a bone anchor with different lengths (see abstract, Col 6 lines 35-42).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the equipment of Taylor to have a second free end with an integral threaded rod and the extension piece with a tapered hole/bore, where the rod and bore are threadingly connected to each other, in view of Craig so that the length of the bone anchor can be adjusted adjust in order to provide a bone anchor with different lengths.

5. **Claims 5, 10-12, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al US 6,267,765 and Craig et al US 5,507,817 as applied to claims 1-4, 18 above, and further in view of Rudloff US 6,010,507.

The combination of Taylor in view of Craig discloses the claimed invention as discussed above, but does not disclose the head portion of the extension piece to be flexible in order to be positioned askew in the direction.

Rudloff discloses a threaded fastener (#10) which is flexible which allows a surgeon to position the fastener in various positions/angles such as a curvilinear path (see Col 5 lines 1-5).

It would have been obvious to one having ordinary skill in the art to modify the extension piece of the combination of Taylor as modified by Craig to be flexible in view of Rudloff because it allows a surgeon to position the fastener in various positions/angles such as a curvilinear path.

6. **Claims 6-7, 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al US 6,267,765, Craig et al US 5,507,817, Rudloff US 6,010,507 as applied to claims 5, 19 above, and further in view of Giannakakos US 2003/0086772.

The combination of Taylor, Craig and Rudloff disclose the claimed invention as discussed above but does not specifically disclose the threads of the extension piece is in the form of a metal wire wound into a spiral, where the wire has spirals that are contiguous.

However Giannakakos discloses a screw (#12) where the thread is made out of a flexible structure of a metal wire (#10 as seen in Fig 1) wound in a spiral with spires that are contiguous (see Figs 5-7 and paragraph 19, where the thread is made out of a metal wire which has spires) and are flexible, light weight and provide excellent corrosion resistance (see paragraph 11)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the threads of the extension piece of the combination of Taylor as modified by Craig and Rudloff, to be a flexible metal wire wound into a spiral with spires in view of Giannakakos because it applies a known technique to a known device ready for improvement to yield predictable results of forming a thread on a screw/fastener in order to provide threads that are flexible, light weight and provide excellent corrosion resistance.

### *Response to Arguments*

7. Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

The prior art made of record and relied upon is considered pertinent to the applicant's disclosure. See PTO-892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAN CHRISTOPHER MERENE whose telephone number is (571)270-5032. The examiner can normally be reached on 8 am - 6pm Mon-Thurs, alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jan Christopher Merene/
Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733